

Worksheet for Technical Review of Working Draft of Proposed Permit

Company Name:	Pine Prairie Energy Center, LLC	AI #:	123347	TEMPO Activity No:	PER20090003
Facility Name:	Pine Prairie Energy Center, LLC	Remarks Submitted by:	Richard S. Anderson, Pine Prairie Energy Center, LLC.		
Permit Writer:	Dustin Duhon	Permit Writer Email address:	dustin.duhon@la.gov		

Instructions

Permit Reference – Indicate specific portion(s) of the permit to which the remark relates (i.e. “Specific Condition 120”, or “Section II Air Permits Briefing Sheet”, etc.).

Remarks – Explain the basis for each remark. Provide regulatory citations where possible. If the remark is made due to an error or omission in the permit application this must be noted and the revised information **must be submitted**. Revised information may be submitted separately from this worksheet. Please be aware that revised information must be submitted in writing and certified by the Responsible Official, and if necessary, by a Professional Engineer licensed in Louisiana. *Please Note:* New or additional equipment, processes or operating conditions not addressed in the original permit application will be addressed on a case-by-case basis. The Department reserves the right to address such changes in a separate permit action.

DEQ Response – DO NOT COMPLETE THIS SECTION. This section will be completed by Air Permits Division of DEQ, included in the proposed permit package and made available for public review during any required public comment period.

- Additional rows may be added as necessary.
- Completed Form shall be emailed to the Permit writer in MS Word compatible format within the deadline specified in the email notification.

- DO NOT USE THIS FORM TO SUBMIT COMMENTS DURING THE OFFICIAL PUBLIC COMMENT PERIOD.

Permit Reference	Remarks	Air Permits Division Response (for official use only)
Statement of Basis, p. 7, 2 nd paragraph	The Statement of Basis states that CAM provisions for EQT13-16 have been incorporated as Specific Requirements 155-170. However, in the copy of the Specific Requirements that accompanied the Statement of Basis, they are numbers 1-16.	This reference was corrected as requested.
Table of Emission Rates for Criteria Pollutants	EQT 0031 – The corresponding equipment number was changed from D-960 to T-1600. The emissions also appear to be incorrect. In the renewal application, they were represented as 0.05 Avg lb/hr, n/a Max 1lb/hr, and 0.20 Tons/Year (all VOC). The Max lb/hr can be set at 0.05, same as the Avg lb/hr value.	This change was made.
Table of Emission Rates for Criteria Pollutants	FUG 0001 shows a value of 5.72 Tons/Year for VOC. In the application, however, this was represented as 8.85 Tons/Year. (The hourly VOC emission rate is correct as shown.)	This change was not made. The 8.85 value seems to be the result of a calculation error. It appears that the applicant double counted the methanol emissions.

Permit Reference	Remarks	Air Permits Division Response (for official use only)
Table of Emission Rates for Criteria Pollutants	<p>GRP 0001 – the Avg lb/hr values are all 1/3 of the values that were represented in the application. The correct values should be:</p> <p>CO = 0.95 Avg lb/hr NOx = 1.13 Avg lb/hr PM10 = 0.09 Avg lb/hr VOC = 0.81 Avg lb/hr</p> <p>The value for SO2 is correct.</p>	<p>This change was not made. These average emission rates reflect the total hours of operation for all BTEX units. The applicant indicated that it might run a BTEX unit 5,694 hr/yr. This draft permit would allow them each to run 5,694 hr/yr for a grand total of 17,082 hr/yr. In accordance with the <i>Louisiana Guidance for Air Permitting Actions</i>, the tons/yr value must be able to be converted to the average lb/hr value using the hours of operation. This does not alter the ability of the facility to operate all BTEX units simultaneously, but rather ensures that the facility is adequately permitted to do so.</p>
Table of Emission Rates for Criteria Pollutants	<p>GRP 0002 – Similar to GRP 0001, some of the hourly emission rates are 1/3 of the values that were represented in the application. The annual value for VOC is also incorrect.</p> <p>The correct values should be:</p> <p>CO = 0.47 Avg lb/hr NOx = 0.56 Avg lb/hr PM10 = 0.04 Avg lb/hr VOC = 0.50 Avg lb/hr VOC = 1.44 Tons/Year</p>	<p>This change was not made. These average emission rates reflect the total hours of operation for all reboilers. The applicant indicated that it might run a reboiler for 5,694 hr/yr. This draft permit would allow them each to run 5,694 hr/yr for a grand total of 17,082 hr/yr. In accordance with the <i>Louisiana Guidance for Air Permitting Actions</i>, the tons/yr value must be able to be converted to the average lb/hr value using the hours of operation. This does not alter the ability of the facility to operate all reboilers simultaneously, but rather ensures that the facility is adequately permitted to do so.</p>
Table of Emission Rates for Criteria Pollutants	<p>FUG0003 – In the renewal application, it was requested that this source be changed to an insignificant activity and removed from the Criteria Pollutants table.</p>	<p>This change was not made. This source has a large max lb/hr VOC emission rate and a relatively large max lb/hr n-hexane emission rate. The short term emission rates from this source are significant enough to affect the facility's ability to comply with the n-Hexane Ambient Air Standard from LAC 33:III, Chapter 51. As a result, LDEQ does not consider these emissions to be insignificant.</p>

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Table of Emission Rates for TAP/HAP	EQT0031 – The equipment number for this unit should be changed from D-960 to T-1600 as shown in the application. The methanol emission rates should be 0.05 Avg lb/hr and 0.20 Tons/Year. The Max lb/hr figure is correct.	This change was made.
Table of Emission Rates for TAP/HAP	EQT0032 – The equipment number for this unit should be changed from D-690A to T-1900A as shown in the application. The ammonia emission rates should be 0.12 Avg lb/hr and 0.54 Tons/Year. The Max lb/hr figure is correct.	This change was made.
Table of Emission Rates for TAP/HAP	EQT0033 – The equipment number for this unit should be changed from D-690B to T-1900B as shown in the application. The ammonia emission rates should be 0.12 Avg lb/hr and 0.54 Tons/Year. The Max lb/hr figure is correct.	This change was made.
Table of Emission Rates for TAP/HAP	FUG0003 – In the renewal application, it was requested that this source be changed to an insignificant activity and removed from the Criteria Pollutants table. We assume it should also be removed from the TAP/HAP table as well, but leave that to DEQ's discretion.	This change was not made. This source has a large max lb/hr VOC emission rate and a relatively large max lb/hr n-hexane emission rate. The short term emission rates from this source are significant enough to affect the facility's ability to comply with the n-Hexane Ambient Air Standard from LAC 33:III Chapter 51. As a result, LDEQ does not consider these emissions to be insignificant.
Table of Emission Rates for TAP/HAP	GRP0001 – several of the Avg lb/hr figures are incorrect. They should be: Benzene = 0.05 Avg lb/hr Ethyl benzene = 0.10 Avg lb/hr Toluene = 0.08 Avg lb/hr Xylene (mixed isomers) = 0.27 Avg lb/hr n-Hexane = 0.04 Avg lb/hr The value for formaldehyde is correct.	This change was not made. These average emission rates reflect the total hours of operation for all BTEX units. The applicant indicated that it might run a BTEX unit 5,694 hr/yr. This draft permit would allow them each to run 5,694 hr/yr for a grand total of 17,082 hr/yr. In accordance with the <i>Louisiana Guidance for Air Permitting Actions</i> , the tons/yr value must be able to be converted to the average lb/hr value using the hours of operation. This does not alter the ability of the facility to operate all BTEX units simultaneously, but rather ensures that the facility is adequately permitted to do so.
Table of Emission Rates for TAP/HAP	GRP0002 – two of the Avg lb/hr figures are incorrect. They should be: Xylene (mixed isomers) = 0.01 Avg lb/hr n-Hexane = 0.04 Avg lb/hr All others are okay.	This change was not made. These average emission rates reflect the total hours of operation for all reboilers. The applicant indicated that it might run a reboiler for 5,694 hr/yr. This draft permit would allow them each to run 5,694 hr/yr for a grand total of 17,082 hr/yr. In accordance with the <i>Louisiana Guidance for Air Permitting Actions</i> , the tons/yr value must be able to be converted to the average lb/hr value using the hours of operation. This does not alter the ability of the facility to operate all reboilers simultaneously, but rather ensures that the facility is adequately permitted to do so.

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Table of Emission Rates for TAP/HAP should be: Acetaldehyde = 5.85 Tons/Year Acrolein = 3.6 Tons/Year Ammonia = 3.86 Tons/Year Benzene = 0.46 Tons/Year Ethyl benzene = 0.29 Tons/Year Formaldehyde = 4.80 Tons/Year Methanol = 5.07 Tons/Year Toluene = 0.52 Tons/Year Xylene (mixed isomers) = 0.93 Tons/Year n-Hexane = 1.45 Tons/Year	UNF 0001 – After taking into consideration the changes described above, the Tons/Year figures for UNF 0001 should be: Acetaldehyde = 5.85 Tons/Year Acrolein Total 3.6 Ammonia Total 3.86 Benzene Total 0.46 Ethyl benzene Total 0.29 Formaldehyde Total 4.80 Methanol Total 5.07 n-Hexane Total 1.48 Toluene Total 0.52 Xylene (mixed isomers) Total 0.93	The facility-wide emissions were updated as appropriate to incorporate the above referenced changed. Specifically, the emission rates were changed to read as follows: Acetaldehyde Total 5.85 Acrolein Total 3.6 Ammonia Total 3.86 Benzene Total 0.46 Ethyl benzene Total 0.29 Formaldehyde Total 4.80 Methanol Total 5.07 n-Hexane Total 1.48 Toluene Total 0.52 Xylene (mixed isomers) Total 0.93

(end of comments)